

06-15-04

1 fle



EXPRESS MAIL LABEL NO.: EV 437486799 US

PATENT APPLICATION
Docket No. 48930-01403

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Roger W. Phillips

Application No.: 10/781,402

Filed: February 18, 2004

For: COLOR SHIFTING CARBON-CONTAINING
INTERFERENCE PIGMENTS

)
)
) Art Unit
)
)
)
)
)

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

In compliance with the duty to disclose information material to patentability pursuant to 37 C.F.R. 1.56, it is respectfully requested that this Information Disclosure Statement be entered and the documents listed on attached Form PTO/SB/08A and 08B be considered by the Examiner and made of record. Copies of all documents are not enclosed as they can be found in the parent applications. In accordance with 37 C.F.R. § 1.97(g) and (h), filing of this Information Disclosure Statement is not to be construed as a representation that a search has been made or an admission that the information cited herein is, or is considered to be, material to patentability as defined in 37 C.F.R. § 1.56(b). Further, no representation is made by Applicants herein that no other possible material information as defined in 37 C.F.R. § 1.56(b) exists.

To the extent any additional fees are due in connection with this communication,
Applicants request that they be withdrawn from Deposit Account No. 082665.

DATED this 14th day of June, 2004.

Respectfully submitted,



David O. Seeley, Reg. No. 30,148
Customer No. 34013
Holme Roberts & Owen LLP
299 South Main Street, Suite 1800
Salt Lake City, Utah 84111
(801) 521-5800

EXPRESS MAIL LABEL NO.: EV 437486799 US

PATENT APPLICATION
Docket No. 48930-01403

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:	Roger W. Phillips)
)
Application No.:	10/781,402) Art Unit
)
Filed:	February 18, 2004)
)
For:	COLOR SHIFTING CARBON-CONTAINING)
	INTERFERENCE PIGMENTS)

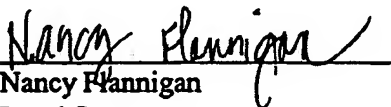
CERTIFICATE OF EXPRESS MAIL

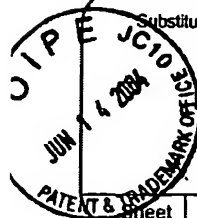
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

I hereby certify that the below listed documents are being deposited with the United States Postal Service "Express Mail Post Office to Addressee," Certificate # EV 437486799 US under 37 CFR 1.10 in an envelope addressed to: Commissioner of Patents and Trademarks, P.O. Box 1450, Alexandria, VA 22313-1450.

1. Information Disclosure Statement Transmittal Form (2 pgs.)
2. Information Disclosure Statement by Applicant, Form PTO/SB/08A & 08B (6 pgs.)
3. Return Receipt Postcard

DATED this 14th day of June, 2004.


Nancy Flannigan
Legal Secretary
Holmes Roberts & Owen LLP
299 South Main, Suite 1800
Salt Lake City, UT 84111
(801) 521-5800



Substitute for form 1449/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Complete if Known

Application Number	10/781,403-402
Filing Date	February 18, 2004
First Named Inventor	Roger W. Phillips
Art Unit	
Examiner Name	
Attorney Docket Number	48930-01403

Sheet 1 of 6

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Document Number		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ^{2(d) known}				
	1	US-	3,011,383	12-05-1961	Sylvester et al.	
	2	US	3,123,490	03-03-1964	Bolomey et al.	
	3	US	3,412,575	11-26-1968	Feldman et al.	
	4	US	3,622,473	11-23-1971	Ohta et al.	
	5	US	3,926,659	12-16-1975	Bernhard et al.	
	6	US	3,949,139	04-06-1976	Dunning et al.	
	7	US	3,962,397	06-08-1976	Narui et al.	
	8	US	3,988,494	10-26-1976	McAdow	
	9	US	4,116,710	09-26-1978	Heikel	
	10	US	4,168,983	09-25-1979	Vittands et al.	
	11	US	4,213,886	07-22-1980	Turner	
	12	US	4,309,075	01-05-1982	Apfel et al.	
	13	US	4,321,087 ✓	03-23-1982	Levine et al.	
	14	US	4,434,010	02-28-1984	Ash	
	15	US	4,552,593	11-12-1985	Ostertag	
	16	US	4,629,512	12-16-1986	Kondis	
	17	US	4,705,300	11-10-1987	Berning et al.	
	18	US	4,705,356	11-10-1997	Berning et al.	
	19	US	4,721,217	01-26-1988	Phillips et al.	
	20	US	4,756,771	07-12-1988	Brodalla et al.	

FOREIGN PATENT DOCUMENTS

Examiner Initials ^o	Cite No. ¹	Foreign Patent Document ^{4(a)}	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	
		Country Code ³ - Number ⁴ - Kind Code ⁵ (if known)				
	21	4-264513	09/1992	Japan		<input type="checkbox"/>
	22	61198201-A	09/1986	Japan		<input type="checkbox"/>
	23	11213335	08-06-1999	Japan		<input type="checkbox"/>
	24	55117106	09-09-1980	Japan		<input type="checkbox"/>
	25	61198201	09-02-1986	Japan		<input type="checkbox"/>
	26	WO 96/22336	07-25-1996	PCT		<input type="checkbox"/>

Examiner Signature	Date Considered
--------------------	-----------------

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹Applicant's unique citation designation number (optional). ²See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the complete application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)

Complete if Known

Application Number 10/781,403 402
Filing Date February 18, 2004
First Named Inventor Roger W. Phillips
Art Unit
Examiner Name
Attorney Docket Number 48930-01403

Sheet 2 of 6

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Document Number		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ^{2(a) known}				
	27	US-	4,799,745	01-24-1989	Meyer et al.	
	28	US	4,838,648	06-13-1989	Phillips et al.	
	29	US	4,851,095	07-25-1989	Scobey, et al.	
	30	US	4,978,394	12-18-1990	Ostertag	
	31	US	5,009,486	04-23-1991	Dobrowolski et al.	
	32	US	5,059,245	10-22-1991	Phillips et al.	
	33	US	5,084,351	01-28-1992	Phillips et al.	
	34	US	5,116,664	05-26-1992	Kimura et al.	
	35	US	5,135,812	08-04-1992	Phillips et al.	
	36	US	5,171,363	12-15-1992	Phillips et al.	
	37	US	5,190,807	03-02-1993	Kimock et al.	
	38	US	5,198,042	03-30-1993	Masumoto et al.	
	39	US	5,225,057	07-06-1993	LeFebvre, et al.	
	40	US	5,278,590	01-11-1994	Phillips et al.	
	41	US	5,279,657	01-18-1994	Phillips et al.	
	42	US	5,322,767	01-21-1994	Ohshima et al.	
	43	US	5,356,471	10-18-1994	Reynders	
	44	US	5,364,467	11-15-1994	Schmid et al.	
	45	US	5,378,527	01-03-1995	Nakanishi et al.	
	46	US	5,549,774	08-27-1996	Miekka et al.	

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	
		Country Code ³ - Number ⁴ - Kind Code ⁵ (if known)				
	47	WO 96/38505	12-05-1996	PCT		
	48	WO 98/12583	03-26-1998	PCT		
	49	WO 99/35194	07-15-1999	PCT		
	50	0472371 AI	02-26-1992	EPO		

Examiner Signature

Date Considered

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹Applicant's unique citation designation number (optional). ²See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the complete application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Complete if Known

Application Number	10/781,403 402
Filing Date	February 18, 2004
First Named Inventor	Roger W. Phillips
Art Unit	
Examiner Name	
Attorney Docket Number	48930-01403

Sheet 3 of 6

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Document Number		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ^{2(a)} (known)				
	51	US	5,571,624	11-05-1996	Phillips et al.	
	52	US	5,573,584	11-12-1996	Ostertag et al.	
	53	US	5,593,773	01-14-1997	McKay et al.	
	54	US	5,607,504	03-04-1997	Schmid et al.	
	55	US	5,624,076	04-29-1997	Miekka et al.	
	56	US	5,624,486	04-29-1997	Schmid et al.	
	57	US	5,629,068	05-13-1997	Miekka et al.	
	58	US	5,648,165	07-15-1997	Phillips et al.	
	59	US	5,656,128	08-12-1997	Hashimoto et al.	
	60	US	5,662,738	09-02-1997	Schmid, et al.	
	61	US	5,672,410	09-30-1997	Miekka et al.	
	62	US	5,707,409-A ✓	01-13-1998	Martin et al.	
	63	US	5,763,086	06-09-1998	Schmid et al.	
	64	US	5,766,344	06-16-1998	Hashizume et al.	
	65	US	5,766,335	06-16-1998	Bujard et al.	
	66	US	5,789,068	08-04-1998	King et al.	
	67	US	5,790,304	08-04-1998	Sanders et al.	
	68	US	5,830,567	11-03-1998	Panush	
	69	US	5,858,078	01-12-1999	Andes et al.	

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	
		Country Code ³ - Number ⁴ - Kind Code ⁵ (if known)				

Examiner
SignatureDate
Considered

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹Applicant's unique citation designation number (optional). ²See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the complete application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

(Use as many sheets as necessary)

Application Number	10/781,403 402
Filing Date	February 18, 2004
First Named Inventor	Roger W. Phillips
Art Unit	
Examiner Name	
Attorney Docket Number	48930-01403

Sheet	4	of	6
-------	---	----	---

70	US	5,877,895	03-02-1999	Shaw et al.
71	US	6,001,521	12-14-1999	Hashizume et al.
72	US	6,013,370	01-11-2000	Coulter et al.
73	US	6,114,018	09-05-2000	Phillips et al.
74	US	6,246,523	06-12-2001	Bradley et al.
75	US	6,304,427	10-16-2001	Reed et al.
76	US	6,392,220	05-21-2002	Slater et al.

[illegible]

**Examiner
Signature**

Date Considered

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. 'Applicant's unique citation designation number (optional). 'See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. 'Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 'For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. 'Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. 'Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the complete application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

Substitute for form 1449/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)

Complete if Known

Application Number	10/781,403- 402
Filing Date	February 18, 2004
First Named Inventor	Roger W. Phillips
Art Unit	
Examiner Name	
Attorney Docket Number	48930-01403

Sheet 5 of 6

NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.
	77	Barrett and Nix, <i>The Principles of Engineering Materials</i> , Prentice Hall, Inc., 282-290, 1973.
	78	Callister WD, Jr., <i>Material Science and Engineering: An Introduction</i> , John Wiley & Sons, Inc., 91-112, 1985.
	79	Zink, et al., <i>Optical Probes and Properties of Aluminosilicate Glasses Prepared by the Sol-Gel Method</i> , <i>Polymer Material Science and Engineering</i> , 61, 204-208, 1989.
	80	McKiernan et al, <i>Luminescence and Laser Action of Coumarin Dyes Doped in Silicate and Aluminosilicate Glasses Prepared by the Sol-Gel Technique</i> , <i>Journal of Inorganic Organometallic Polymers</i> , Vol. 1, No.1, 87-103, 1991.
	81	Greiwe K., <i>Coloured Aluminum Pigments</i> , Eckart-Werke, Werk Güntersthal, 4 th Nürnberg Congress, Paper 6, 1-7.
	82	The Mearle Corporation brochure for "Mearle Iridescent Film," Peekskill, New York.
	83	J.A. Dobrowolski; K.M. Baird; P.D. Carman; and A. Waldof, "Optical Interference Coatings for Inhibiting of Counterfeiting," <i>Optica Acta</i> , 1973, Vol. 20, No. 12, 925-937.
	84	The R.D. Mathis Company Manual for "Think Film Evaporation Source Reference," Long Beach, CA.
	85	Minolta Manual for "Precise Color Communication, Color Control From Feeling to Instrumentation," Pages 18, 20, 22, 23, 46, 47, 48 and 49.
	86	R. Hermann and G. Braüer, "DC and RF-Magnetron Sputtering," and J. Becker, "Ion Beam Sputtering," <i>Handbook of Optical Properties</i> , Vol. 1, pp. 135-212, R.E. Hummel and K.H. Guenter (eds), CRC Press (1995).
	87	D.G. Teer, "Reactive Magnetron Sputter Barrel Ion Plating," Conference Proceedings IPAT 91, p. 303-308, Brussels, Belgium.
	88	C. Window and N. Savvides, "Charged Particle Fluxes From Planar Magnetron Sputtering Sources," <i>J. Vac. Sci. Technol. A</i> 4(2), March/April 1986, p. 196-202.
	89	N. Savvides and B. Window, "Unbalanced Magnetron Ion-Assisted Deposition and Property Modification of Thin Films," <i>J. Vac. Sci. Technol. A</i> 4(3), May/June 1986, p. 504-508.

Examiner Signature	Date Considered
--------------------	-----------------

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. *Applicant's unique citation designation number (optional). ²See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the complete application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Complete if Known

Application Number	10/781,403 402
Filing Date	February 18, 2004
First Named Inventor	Roger W. Phillips
Art Unit	
Examiner Name	
Attorney Docket Number	48930-01403

Sheet 6 of 6

NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	
	90	B. Window, F. Sharples, and N. Savvides, "Magnetically Confined Sputter Source with High Ion Flux," J. Vac. Sci. Technol. A 3(6), November/December 1985, p. 2368-2372.	
	91	N.A.G. Ahmed and D.G. Teer, "A Simple and Inexpensive Rotating Barrel to Ion Plate Small Components," J. Phys. E.Sci.Instrum., Vol. 17, 1984, p.411-416.	
	92	Myong Ryeong Kim, "Magnetron Sputter Deposited CoPtCr Magnetic Thin Films for Information Storage," Ph.D. Dissertation Thesis, Department of Metallurgical Engineering, The University of Utah, June 1993.	
	93	Rancourt, James D., Optical Thin Films User's Handbook, page 4, 1987.	
	94	Pearl Lustre Pigments, Physical Principles, Properties, Applications, Merck, pp. 30-35, 1992.	

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹Applicant's unique citation designation number (optional). ²See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the complete application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.